Measuring quality in community nursing: a mixed-methods study

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Scientific summary

Quality indicators for community nursing

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Scientific summary

Background

Moving care from acute to community settings is a priority across England. Consequently, providing high-quality community nursing care is essential. The measurement of care quality is typically achieved through NHS contracts incorporating quality measures and pay-for-performance indicator schemes, such as Commissioning for Quality and Innovation (CQUIN). These can be used for service improvement purposes by Clinical Commissioning Groups (CCGs), which buy health-care services from provider organisations on behalf of NHS patients. There are > 150 community nursing providers in England, each having a bespoke set of indicators comprising a blend of national/regional requirements and locally selected indicators. Variability in schemes to suit local needs precludes meaningful comparison between provider organisations.

Specific problems inherent in measuring quality in community nursing arise because community nurses' practice in patients' homes goes largely unseen, care episodes tend to be extended time periods and nurses cannot ensure 24-hour patient compliance with best practice. Community nurses work alongside other services and carers (including patients' relatives and friends), so that direct attribution of any change in health status to specific interventions is often problematic. Furthermore, patients on community nursing caseloads are generally frail, with deteriorating conditions and comorbidities; therefore, the establishment of meaningful indicators is challenging.

Despite substantial NHS investment in quality indicator (QI) schemes, relatively little is known about how measures are used by commissioners and service providers in practice or how they are perceived by service users (patients and carers).

Objectives

The research aimed to study the selection, application and usefulness of QIs used in community nursing provision. A particular focus was to identify what works, for whom and in what circumstances to ensure that indicators achieve their intended goal of improving patient care. Another key area of interest concerned the challenges facing service providers in collecting information for monitoring quality, with a specific focus on care delivery in patients' homes.

The study objectives were to establish:

- which QIs are selected locally, regionally and nationally for community nursing
- how they are selected and applied
- their usefulness to service users, commissioners and community provider staff.

Methods

The study took place from 2014 to 2016. National Research Ethics Service approval was gained in 2014, and NHS permissions were granted between November 2014 and July 2015. A mixed-methods design in three phases was utilised to provide both breadth and depth of analysis. This was conducted sequentially as follows.

Phase 1: national survey (2014–15)

A survey of the 211 English CCGs operating in 2014 identified providers of community nursing services nationally together with their associated QI schemes. Data comprising different indicator types, including CQUIN schemes and key performance indicators, were received. As the aim of phase 1 was to gain a broad national quality snapshot, the analysis was focused on CQUINs, as these were submitted in a format sufficiently consistent to allow cross-organisation comparison.

The documentation received rarely specified its relevance to community nursing, and indicators were scrutinised to determine their relevance to the study. For an indicator to be classified as a community nursing indicator, either community nurses were directly involved in collecting data or their activities made an essential contribution to its achievement. Research team members with commissioning and community nursing backgrounds identified relevant indicators.

Community nursing indicators were coded according to the following criteria:

- type (nationally mandated or local)
- relevance to patient safety, patient experience or clinical effectiveness of care
- relevance to structure (e.g. staff numbers), process (activities carried out by staff in relation to service delivery) or outcome (impact of health activities on patients)
- area of care (e.g. dementia)
- indicator source (e.g. National Institute for Health and Care Excellence, the NHS Outcomes Framework).

The resulting data were descriptively analysed using IBM SPSS Statistics 20.0 (IBM Corporation, Armonk, NY, USA).

Phase 2: case study (2015–16)

An in-depth qualitative case study was conducted, exploring the processes of selection and application and the perceived usefulness of community nursing QIs. Case study sites, each comprising a CCG and its associated provider of community nursing services, were identified from the survey findings, aiming to ensure diversity in:

- geographical and demographic characteristics
- range and number of QIs
- provider organisation type (NHS or independent).

Data collection comprised:

- semistructured interviews with NHS England (NHSE) national and regional officers, commissioners and provider managers
- focus groups and shadowing of front-line clinical teams
- interviews and a focus group with service users
- observation of organisational meetings.

Participant inclusion criteria included:

- NHSE national and regional quality leads who could provide understanding about national/regional quality directives' influence on local implementation of quality schemes
- commissioners and provider managers directly responsible for community nursing services, or whose remit included quality in community nursing services
- registered community nurses delivering nursing care to people aged ≥ 18 years in their own homes
- patients aged ≥ 18 years receiving care from community nurses in their own homes and/or their carers.

All interview and focus group data were audio-recorded and transcribed, and contemporaneous notes were made during observations and shadowing activities. Constant comparison techniques were used for data analysis, which informed data collection through the regular sharing of interpretations between the research team. Data were open-coded initially to generate concepts and validated by comparison and discussion among the research team. Agreed codes were used to construct a framework within QSR NVivo 10 (QSR International, Warrington, UK) and each team member coded a particular set of data across the sites. Individual databases were merged regularly to assess any differences in the application of codes. Further analysis resulted in identifying themes relating to the selection, application and usefulness of QIs in the case study sites.

Documentary analysis was limited owing to considerable variation in documents received from the case study sites. The standard NHS contract was analysed to assess the degree of content relating to community nursing service quality. When documents containing information about indicators were obtained, these were also scrutinised to identify community nursing indicators in use in 2015/16.

Following descriptive and thematic analysis, the findings from phases 1 and 2 were jointly synthesised using a framework that facilitated relating them to the wider context for the delivery of community nursing services; organisational and professional considerations; patients (and their carers) attended by community nurses; and issues affecting individual community nurses.

Phase 3: stakeholder engagement and development of good practice guidance (2016)

Based on the study findings, draft good practice guidance concerning community nursing indicators was developed. Ten stakeholder events were held across England to test the validity of some of our findings and to gain feedback about the draft guidance. These events comprised two seminars conducted at national community nursing conferences and eight half-day workshops attended by mixed groups of commissioners, provider managers, front-line staff and service users. Sites were identified with reference to the findings of the phase 1 survey and through personal and professional contacts and networks. Four emerging findings, selected for their suitability for discussion in small mixed groups, were presented to delegates who were asked to consider each finding with its associated good practice guidance statements using deliberative dialogue. The events were facilitated by different members of the research team with a range of backgrounds, together with an external consultant with extensive experience of commissioning and group facilitation. The facilitators captured and reported event proceedings.

Patient and public involvement

There was substantial input from service users throughout the study. A service user co-applicant chaired a service user reference group (SURG), two of whose members sat on the research management group. SURG members contributed to selecting research staff, designing data collection tools for service users, interpreting findings, producing the final report, and developing and delivering the stakeholder engagement events.

Findings

Phase 1 found that community nursing is provided mainly by NHS organisations, with < 20% provided by the independent sector. A total of 484 locally worded nurse QIs (CQUINs) were reported from 145 (68.7%) CCGs. An evidence-based source was identified for only 189 (39.0%) indicators used. An analysis found that clinical care effectiveness was a key intended outcome (417 indicators) and that the majority of indicators (336 indicators) concerned processes, rather than focusing on structure or outcomes. A further analysis of CQUIN goals revealed 13 care themes, the largest proportion relating to organisation of care and organisational issues, suggesting that quality incentives were used as a lever to shape change in community-based care.

In phase 2, the study sites comprised one social enterprise and four NHS organisations, one of which provided both acute and community care. Four providers served relatively deprived urban populations, whereas the fifth served a relatively affluent rural population. Population sizes ranged from 300,000 to > 1,000,000.

Interviews were conducted with five NHSE quality leads, 19 commissioners, 32 community nursing service provider managers (including 10 nurse team leaders), 14 patients and seven carers. Nine focus groups were held with 45 community nurses. Community nurses were shadowed in four sites over a total of 78 hours (29.5 hours in patients' homes). Twenty-seven organisational meetings were observed. The main findings were as follows.

Care context

The interviews revealed that national/regional officers aim for balance between ensuring that CCGs are fit for purpose and affording them flexibility and autonomy, and ensuring that issues affecting acute care received more attention than those affecting community nursing. Quality measurement processes are affected by staff shortages, high sickness rates and difficulties with information technology (IT) systems.

Selection

Commissioner and provider interviews and meetings revealed that QI selection was complex and time-consuming.

Front-line staff focus groups reported that indicators are not always fit for purpose; commissioners sometimes appeared incompletely informed about the practicalities of community nursing and the requirements of good clinical practice. The nurse and service user interviews suggested that commissioners and managers should accompany staff on visits to increase their understanding of care context and service quality. Managers and front-line staff gave examples of problems arising from indicators developed for acute settings being rolled out to community settings, leading at times to undesirable unintended consequences.

The participants agreed that front-line staff and service users should have greater involvement in indicator selection.

Application

Commissioner, provider manager and front-line nurse interviews reported that the guidance for national CQUINs can be unclear.

Communication about indicators within provider organisations appeared to be ineffective. Nurses complained that they received insufficient notice of the implementation of new QIs.

Focus group data and front-line observations revealed that nurses do not always appreciate the importance of indicator data. This can impact on the quality of data collected, as can lack of training and staff shortages. Some nurses were concerned that care delivery was driven by indicator targets rather than professional judgement.

External factors (e.g. patient environment or other staff providing care or equipment) can impact on the successful implementation and achievement of community nursing QIs.

Usefulness

The interview data from all participant groups suggested that community nursing quality is difficult to measure and that current indicators do not reflect the true quality of care delivered. 'Softer' aspects of care (time spent, respect, kindness), highly valued by both nurse and service user participants, should be included in quality assessment. All participant groups agreed that quantitative metrics, although useful, are inadequate to measure quality in community nursing; more qualitative measures need to be developed.

Despite evidence of only limited direct positive impact on care, commissioner and manager participants reported that collecting indicator data helped to increase transparency of services, provider accountability and confidence about the quality of care.

Service user and front-line staff interviews reported that some clinical indicators were important for patient outcomes. However, doubts were expressed as to whether or not defined targets are all within the control of nurses. Service user interviews suggested that important aspects of care quality (e.g. continuity) should be assessed and that quality could be better assessed through identifying and monitoring small goals tailored to individual patients.

Integrated care

Few indicators had been applied to joint care initiatives between different organisations. Early attempts to do so had had mixed results.

The ease and efficiency of communication between organisations (e.g. providers and general practices) were affected by the use of incompatible IT systems.

Problems arose when determining responsibility and accountability across care organisations.

The synthesis of findings from phases 1 and 2 indicated that values implicit in a culture of setting and meeting targets appeared at times to clash with those of both service users and front-line nursing staff; the latter consequently felt little engagement or ownership for indicators currently in use. Community nurses expressed concern about loss of professional autonomy and the detrimental effect of some QI targets on care. The current climate of staff shortages and ongoing logistical problems, which appeared at times to be exacerbated by the need to collect data for quality measurement, had contributed to high levels of sickness among community nursing staff. The situation described does not bode well for the capacity of the service to provide consistently high-quality care to patients in the community.

The delegates ($n = 242$) attending the stakeholder engagement events in phase 3 endorsed the key study findings presented and generally agreed with the associated draft good practice guidance statements.

Conclusions

Local community nursing quality incentives have been used to shape organisational change in the community. The current methods for assessing quality of community nursing services, although comparatively useful from a management perspective in relation to accountability and patient safety, are not considered as useful for assessing service effectiveness, owing to difficulties in identifying suitable indicators for the community context. The processes involved in selecting and monitoring indicators are time-consuming, and evidence suggests that the application of indicators designed for acute settings may have unintended consequences detrimental to service users. The values of front-line staff and service users concerning 'softer' aspects of care (time spent, kindness, respect) are not fully represented in current QIs. It is suggested that these values can be assessed only through direct observation or more directly involving service users and front-line staff in feeding back experience of care to commissioners and managers. The development of cross-organisational indicators and the streamlining of communication systems are extremely important for the effective delivery of high-quality integrated care.

The findings suggest that commissioners and provider managers should ensure that service users and front-line staff are involved in identifying and selecting indicators. Quality measures designed for acute settings should not be applied in community settings without modification. Difficulties with connectivity and compatibility should be resolved before rolling new IT packages out into the community in order to prevent undue stresses affecting community nurses' working practices.

Recommendations for research

Further research is needed to investigate appropriate modifications and associated costs of administering QI schemes in integrated care, and systems for determining individualised small goals in order to identify measurable short- and longer-term health outcomes for patients with long-term conditions.

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